```
BLASTP 2.2.20+
Reference: Stephen F. Altschul, Thomas L. Madden, Alejandro
A. Schaffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and
David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new
generation of protein database search programs", Nucleic
Acids Res. 25:3389-3402.
RID: YSX40DNX016
Database: Protein sequences derived from the Patent division of
GenBank
          644,914 sequences; 121,161,582 total letters
Query=
Length=16
                                                                  Score
                                                                            Ε
Sequences producing significant alignments:
                                                                  (Bits) Value
gb|AAA02142.1| Sequence 1 from Patent US 4885357
                                                                  20.2
                                                                          0.45
gb|AAA55740.1| Sequence 14 from Patent EP 0330191
                                                                  18.9
                                                                          1.1
gb|AAA53711.1| Sequence 3 from Patent WO 9000563
                                                                  18.9
                                                                          1.1
gb|AAA56309.1| Sequence 7 from Patent EP 0196864
                                                                          2.0
                                                                  18.0
gb|AAA54420.1| Sequence 14 from Patent WO 8806628 >gb|AAA5600...
                                                                  18.0
                                                                          2.0
gb|AAA54815.1| Sequence 19 from Patent WO 8607383
                                                                  17.6
                                                                          2.6
gb|AAA53695.1| Sequence 2 from Patent WO 9004640
                                                                  17.2
                                                                          3.5
                                                                          4.7
gb|AAA54560.1| Sequence 2 from Patent WO 8805081 >gb|AAA56055... 16.8
qb|AAA54001.1| Sequence 2 from Patent WO 8906283 >qb|AAA54156...
                                                                  15.9 8.5
                                                                          8.5
gb|AAA00924.1| Sequence 1 from Patent US 4657891
                                                                  15.9
ALIGNMENTS
>gb|AAA02142.1| Sequence 1 from Patent US 4885357
Length=21
Score = 20.2 bits (40), Expect = 0.45
Identities = 6/6 (100%), Positives = 6/6 (100%), Gaps = 0/6 (0%)
Query 10 LLALLA 15
          LLALLA
          LLALLA 13
Sbjct 8
Score = 16.3 bits (31), Expect = 6.4
Identities = 7/11 (63%), Positives = 7/11 (63%), Gaps = 2/11 (18%)
Query 5
          LLPAVLLALLA
                       15
          LL
              LLAL A
Sbjct 8
          LLA--LLALFA 16
>gb|AAA55740.1| Sequence 14 from Patent EP 0330191
Length=27
Score = 18.9 bits (37), Expect = 1.1
Identities = 7/9 (77%), Positives = 8/9 (88%), Gaps = 1/9 (11%)
Query 5
          LLPAVLLAL
```

LLP +LLAL

```
Sbjct 9 LLP-LLLAL 16
Score = 15.1 bits (28), Expect =
Identities = 6/10 (60%), Positives = 6/10 (60%), Gaps = 3/10 (30%)
Query 5
          LLPAVLLALL 14
          _{
m LL}
             LL LL
Sbjct 7
         LL---LLPLL 13
>gb|AAA53711.1| Sequence 3 from Patent WO 9000563
Length=99
Score = 18.9 bits (37), Expect = 1.1
Identities = 6/7 (85%), Positives = 6/7 (85%), Gaps = 0/7 (0%)
Query 2
          AVALLPA 8
          AVALL A
Sbjct 6
          AVALLAA 12
Score = 15.1 bits (28), Expect =
Identities = 6/8 (75%), Positives = 6/8 (75%), Gaps = 2/8 (25%)
Query 8
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          AV ALLA
Sbjct 6
         AV--ALLA 11
>gb|AAA56309.1| Sequence 7 from Patent EP 0196864
Length=77
Score = 18.0 bits (35), Expect = 2.0
Identities = 7/10 (70%), Positives = 8/10 (80%), Gaps = 2/10 (20%)
Query 2 AVALLPAVLL 11
          A+ALLP LL
Sbjct 7
          ALALLP--LL 14
Score = 14.6 bits (27), Expect =
                                   21
Identities = 4/4 (100%), Positives = 4/4 (100%), Gaps = 0/4 (0%)
Query 11 LALL 14
          LALL
Sbjct 8
          LALL 11
Score = 9.1 bits (14), Expect = 943
Identities = 2/2 (100%), Positives = 2/2 (100%), Gaps = 0/2 (0%)
Query 13 LL 14
          LL
Sbjct 69 LL
             70
>gb|AAA54420.1| Sequence 14 from Patent WO 8806628
gb|AAA56005.1| Sequence 5 from Patent EP 0281363
Length=91
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Score = 18.0 bits (35), Expect = 2.0
Identities = 7/10 (70%), Positives = 8/10 (80%), Gaps = 2/10 (20%)
Query 2
          AVALLPAVLL 11
          A+ALLP LL
Sbjct 7
          ALALLP--LL 14
Score = 14.6 bits (27), Expect =
Identities = 4/4 (100%), Positives = 4/4 (100%), Gaps = 0/4 (0%)
Query 11 LALL 14
          LALL
         LALL 11
Sbjct 8
>gb|AAA54815.1| Sequence 19 from Patent WO 8607383
Length=22
Score = 17.6 bits (34), Expect = 2.6
Identities = 7/12 (58%), Positives = 9/12 (75%), Gaps = 2/12 (16%)
Query 3
         VALLPAVLLALL 14
          +AL A+LL LL
          IAL--ALLLPLL 15
Sbjct 6
Score = 15.5 bits (29), Expect =
                                   11
Identities = 5/6 (83%), Positives = 5/6 (83%), Gaps = 0/6 (0%)
Query 11 LALLAP
          LALL P
Sbjct 8
          LALLLP 13
>gb|AAA53695.1| Sequence 2 from Patent WO 9004640
Length=86
Score = 17.2 bits (33), Expect = 3.5
Identities = 6/8 (75%), Positives = 7/8 (87%), Gaps = 0/8 (0%)
Query 7 PAVLLALL 14
          PAV+L LL
          PAVILFLL 10
Sbjct 3
>gb|AAA54560.1| Sequence 2 from Patent WO 8805081
gb|AAA56055.1| Sequence 11 from Patent EP 0273774
Length=24
Score = 16.8 bits (32), Expect = 4.7
Identities = 8/13 (61%), Positives = 8/13 (61%), Gaps = 3/13 (23%)
Query 4
          ALLPAVLLALLAP 16
          ALL LL LL P
Sbjct 8 ALL---LLLLLP 17
Score = 15.9 bits (30), Expect = 8.5
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```
Identities = 7/11 (63%), Positives = 8/11 (72%), Gaps = 2/11 (18%)
Query 4
         ALLPAVLLALL 14
         AL A+ LALL
Sbjct 2 AL--AITLALL 10
Score = 15.5 bits (29), Expect =
                                   11
Identities = 7/13 (53%), Positives = 9/13 (69%), Gaps = 2/13 (15%)
Query 2 AVALLPAVLLALL 14
          A+ L A+LL LL
Sbjct 4 AITL--ALLLLL 14
>gb|AAA54001.1| Sequence 2 from Patent WO 8906283
gb|AAA54156.1| Sequence 42 from Patent WO 8900999
Length=30
Score = 15.9 bits (30), Expect = 8.5
Identities = 7/12 (58%), Positives = 7/12 (58%), Gaps = 3/12 (25%)
Query 1
         AAVALLPAVLLA 12
          AA LL
                 LLA
         AAAGLL---LLA 16
Sbjct 8
Score = 12.9 bits (23), Expect = 67
Identities = 7/13 (53%), Positives = 7/13 (53%), Gaps = 2/13 (15%)
         LLPAVL--LALLA 15
Query 5
         LLP L LLA
Sbjct 4 LLPTAAAGLLLLA 16
>gb|AAA00924.1| Sequence 1 from Patent US 4657891
Length=48
Score = 15.9 bits (30), Expect = 8.5
Identities = 8/12 (66%), Positives = 9/12 (75%), Gaps = 0/12 (0%)
Query 4 ALLPAVLLALLA 15
         ALL + L ALLA
Sbjct 6 ALLKSKLRALLA 17
 Database: Protein sequences derived from the Patent division of GenBank
   Posted date: Apr 17, 2009 6:11 PM
 Number of letters in database: 54,892
 Number of sequences in database: 1,417
Lambda
         K
  0.335 0.297
                    1.50
Gapped
Lambda
         K H
  0.294
          0.110
                   0.610
Matrix: PAM30
Gap Penalties: Existence: 9, Extension: 1
Number of Sequences: 1417
```

```
Number of Hits to DB: 0
Number of extensions: 0
Number of successful extensions: 0
Number of sequences better than 200000: 0
Number of HSP's better than 200000 without gapping: 0
Number of HSP's gapped: 0
Number of HSP's successfully gapped: 0
Length of query: 16
Length of database: 54892
Length adjustment: 5
Effective length of query: 11
Effective length of database: 47807
Effective search space: 525877
Effective search space used: 525877
T: 11
A: 40
X1: 1 (0.5 bits)
X2: 35 (14.8 bits)
X3: 58 (24.6 bits)
S1: 1 (3.6 bits)
S2: 0 (3.2 bits)
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